CLAIMS .

What is claimed is:

1   1.   A method for revising a software application wherein said software application utilizes

2   persistent data, said method comprising:

3   applying an upgrade to a first next level of software that understands both old and new

4   persistent data structure formats;

5   converting all persistent data structures into the old persistent data structure format;

6   applying an upgrade to a second next level of software that understands said old and new

7   persistent data structure formats; and

8   converting all persistent data structures into the new persistent data structure format.

1   2.   The method of claim 1, wherein said persistent data structures comprise communication

2   packet structures.

1   3.   The method of claim 2, wherein said software application comprises a distributed system

2   software application including a plurality of nodes holding non-volatile memory data structures.

1   4.   The method of claim 3, wherein said nodes communicate with one another.

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1 5.   The method of claim 4, wherein the communication between said nodes occurs using said

2 communication packet structures.

1 6.   The method of claim 1, further comprising:

2   applying a downgrade to a first previous level of software that understands both said old

3 and new persistent data structure formats;

4   converting all persistent data structures into the old persistent data structure format; and

5   applying a downgrade to a second previous level of software that understands said old

6 persistent data structure formats.

1 7.   A system for providing updates to a software application wherein said software

2 application utilizes persistent data, said system comprising:

3   a first module operable for applying an upgrade to a first next level of software that

4 understands both old and new persistent data structure formats;

5   a first converter in said first module operable for converting all persistent data structures

6 into the old persistent data structure format;

7   a second module operable for applying an upgrade to a second next level of software that

8 understands said old and new persistent data structure formats; and

9   a second converter in said second module operable for converting all persistent data

10 structures into the new persistent data structure format.

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1   8.   The system of claim 7, wherein said persistent data structures comprise communication

2   packet structures.

1   9.   The system of claim 8, wherein said software application comprises a distributed system

2   software application including a plurality of nodes holding non-volatile memory data structures.

1   10.   The system of claim 9, wherein said nodes communicate with one another.

1   11.   The system of claim 10, wherein the communication between said nodes occurs using

2   said communication packet structures.

1   12.   The system of claim 7, further comprising:

2   a third module operable for applying a downgrade to a first previous level of software

3   that understands both said old and new persistent data structure formats;

4   a third converter in said third module operable for converting all persistent data structures

5   into the old persistent data structure format; and

6   a fourth module operable for applying a downgrade to a second previous level of

7   software that understands said old persistent data structure formats.

1   13.   A system for providing updates to a software application wherein said software

2   application utilizes persistent data, said system comprising:

3   means for applying an upgrade to a first next level of software that understands both old

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4   and new persistent data structure formats;

5   means for converting all persistent data structures into the old persistent data structure

6   format;

7   means for applying an upgrade to a second next level of software that understands said

8   old and new persistent data structure formats; and

9   means for converting all persistent data structures into the new persistent data structure

10 format.

1   14.   The system of claim 13, further comprising:

2   means for applying a downgrade to a first previous level of software that understands

3   both said old and new persistent data structure formats;

4   means for converting all persistent data structures into the old persistent data structure

5   format; and

6   means for applying a downgrade to a second previous level of software that understands

7   said old persistent data structure formats.

1   15.   A program storage device readable by computer, tangibly embodying a program of

2   instructions executable by said computer to perform a method for revising a software application

3   wherein said software application utilizes persistent data, said method comprising:

4   applying an upgrade to a first next level of software that understands both old and new

5   persistent data structure formats;

6   converting all persistent data structures into the old persistent data structure format;

7   applying an upgrade to a second next level of software that understands said old and new

8 persistent data structure formats; and

9   converting all persistent data structures into the new persistent data structure format.

1 16.   The program storage device of claim 15, wherein said persistent data structures comprise

2 communication packet structures.

1 17.   The program storage device of claim 16, wherein said software application comprises a

2 distributed system software application including a plurality of nodes holding non-volatile

3 memory data structures.

1 18.   The program storage device of claim 17, wherein said nodes communicate with one

2 another.

1 19.   The program storage device of claim 18, wherein the communication between said nodes

2 occurs using said communication packet structures.

1 20.   The program storage device of claim 15, wherein said method further comprises:

2   applying a downgrade to a first previous level of software that understands both said old

3 and new persistent data structure formats;

4   converting all persistent data structures into the old persistent data structure format; and

5   applying a downgrade to a second previous level of software that understands said old

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6   persistent data structure formats.

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